

# Biology

## Major

## Minor

## Pre-health Professions Option

## Teaching Certification Option

### Professors:

Barry, Harman, Howard, Morton (Chair), Riley, Vail, Yoder

### Associate Professors:

G. Brewer, Raesly

### Assistant Professors:

Bowe, Pegg, Seddon, Serfass, Shumway

- Biology is often selected as a major by students planning to enter medicine and other health professions careers. If you plan advanced study in the health professions, you should choose the pre-health professions option.

- You may elect the teaching certification option (internship required).

- There is a possibility that the discipline requirements of the major for teaching certification students will change in Fall 2000 as a result of the continuing analysis of NCATE program review requirements. Students interested in the teaching certification option should stay in close contact with the Department Chair and the Department of Educational Professions. It is to your advantage to complete an NCATE-approved program.

	For Major	For Minor	For Pre-Health Prof. Option	For Teaching Cert. Option
Hours Required in Biology:	39-40	24	40	39-40
Hours Required in Other Departments:	32	0	32	74.5
<b>Total Hours Required:</b>	<b>71-72</b>	<b>24</b>	<b>72</b>	<b>113.5-114.5</b>

## Summary of Requirements for Major/Minor in Biology

Major	Minor
<b>1. Introductory Level Courses:</b> <i>(8 hours)</i> BIOL 149 General Biology I <i>(GEP LAC Group C)</i> BIOL 150 General Biology II	
<b>2. Advanced Level Courses:</b> <i>(15 hours)</i> BIOL 304 Microbiology BIOL 310 Cell Biology BIOL 340 General Ecology BIOL 350 Genetics	
<b>3. Distribution Within Department:</b> <i>(16-17 hours)</i> <i>Total of 4 courses in 3 groups; at least 1 in each group:</i> <b>Group I</b> BIOL 302 Animal Physiology BIOL 303 Plant Physiology <b>Group II</b> BIOL 411 Invertebrate Zoology <i>Either BIOL 327 Comparative Anatomy or BIOL 426 Vertebrate Zoology</i> <b>Group III</b> BIOL 311 Morphology of Thallophytes BIOL 312 Morphology of Embryophytes	
<b>4. Elective Hours in Department:</b> <i>(0 hours)</i>	
<b>5. Required Courses in Other Departments:</b> <b>Chemistry:</b> <i>(18 hours)</i> CHEM 101, 102 General Chemistry <i>(101-GEP LAC Group C)</i> CHEM 301, 302 Organic Chemistry <b>Mathematics:</b> <i>(6 hours)</i> MATH 209 Elements of Applied Probability & Statistics <i>(GEP BR Math)</i> or MATH 219 Honors: Elements of Applied Probability & Statistics <i>Select one from:</i> MATH 102 College Algebra <i>(GEP BR Math)</i> MATH 103 Trigonometry MATH 120 Pre-Calculus Mathematics <i>(GEP BR Math)</i> or any course above 210 <b>Physics:</b> <i>(8 hours)</i> PHYS 215, 216 General Physics I and II <i>(215-GEP LAC Group C)</i> or PHYS 261, 262 Principles of Physics I and II <i>(261-GEP LAC Group C)</i>	

## Pre-Health Professions Option for Biology Majors

*(Pre-Dental, Pre-Medical, Pre-Optometry and Pre-Veterinary)*

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### 1. Introductory Level Courses:

*(8 hours)*

BIOL 149 General Biology I (*GEP LAC Group C*)

BIOL 150 General Biology II

### 2. Advanced Level Courses:

*(28 hours)*

BIOL 302 Animal Physiology

BIOL 304 Microbiology

BIOL 310 Cell Biology

BIOL 311 Morphology of the Thallophytes

or BIOL 312 Morphology of the Embryophytes

BIOL 327 Comparative Anatomy

BIOL 340 General Ecology

BIOL 350 Genetics

### 3. Elective Hours in Biology Department:

*(4 hours)*

*Choose 1 course:*

BIOL 306 Vertebrate Embryology

BIOL 404 Histology

BIOL 412 General Parasitology

### 4. Required Advanced Courses in Other Departments:

*(32 hours)*

*Same as major. See #5 above.*

## Summary of Requirements for Teaching Certification Option in Biology

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If you wish to complete a Maryland State approved program in teaching Biology, you must:

- Complete the BA/BS in Biology.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.